

What is claimed is:

1. A top for a cooling tower, comprising:

a generally planar bottom wall having at least one opening therein for accommodating an air current generator and having a plurality of spaced apart hot liquid distributors oriented to distribute hot liquid;

a top wall having at least one opening formed therein for accommodating an air current generator; and

a liquid inlet.

2. The cooling tower top according to claim 1, further comprising opposed side walls unitarily connected to said bottom wall and extending vertically from said bottom wall.

3. The cooling tower top according to claim 1, further comprising opposed end walls unitarily connected to said bottom wall extending vertically from said bottom wall.

4. The cooling tower top according to claim 1, wherein said cooling tower top is unitarily molded from a plastic material.

5. The cooling tower top according to claim 4, wherein said top is rotationally molded.

6. The cooling tower top according to claim 4, wherein the plastic material

is polyethylene.

7. The cooling tower top according to claim 1, wherein said cooling tower top is an enclosed unit.

8. The cooling tower top according to claim 1, wherein said top comprises at least two parts molded from a plastic material, wherein said parts are joined together to form an enclosed unit.

9. The cooling tower top according to claim 8, wherein said parts are rotationally molded.

10. The cooling tower top according to claim 8, wherein the plastic material is polyethylene.

11. The cooling tower top according to claim 1, wherein the generally planar bottom further comprises a plurality of raised portions that reduce the amount of liquid contained therein, reducing the operating weight of the cooling tower.

12. The cooling tower top according to claim 1, further comprising a flow splitter that divides the flow of incoming liquid.

13. The cooling tower top according to claim 12, wherein said flow splitter

is shaped like an inverted “V”.

14. A cooling tower, comprising:

a distributing means unitarily molded from a plastic material for receiving hot liquid and distributing the hot liquid onto at least one fill unit for gravitation of the hot liquid therethrough;

means for cooling the hot liquid using at least one air generator by drawing ambient air currents through said at least one unit and into evaporative contact with the hot liquid; and

means for collecting the cooled liquid disposed below said at least one fill unit.

15. A method for assembling a cooling tower comprising:

unitarily molding a hot liquid distribution unit from a plastic material; and

attaching the distribution unit to a metal frame having opposed side walls, opposed ends and a liquid collection basin disposed below said hot liquid distribution unit wherein said side walls extend vertically therefrom.

16. The method of claim 15, wherein the hot liquid distribution unit is rotationally molded.

17. The method of claim 15, wherein the plastic material is polyethylene.

18. A method for forming a cooling tower top from a plastic material, said

method comprising the steps of:

molding a generally planar bottom wall portion having at least one opening therein for accommodating an air current generator and having a plurality of spaced apart hot liquid distributors oriented to distribute hot liquid;

molding a top wall portion having at least one opening formed therein for accommodating an air current generator; and

molding a liquid inlet portion;

wherein the aforementioned molding steps form a unitarily molded, enclosed liquid distribution unit.

19. The method of claim 18, wherein all three molding steps are carried out in a simultaneous molding process.

20. The method of claim 18, further comprising the step of molding opposed side walls that are unitarily connected to the bottom wall and the side walls extend vertically from the bottom wall.

21. The method of claim 20, wherein all four molding steps are carried out in a simultaneous molding process.

22. The method of claim 18, further comprising the step of molding opposed, end walls that are unitarily connected to the bottom wall and the end walls extend vertically from the bottom wall.

23. The method of claim 18, wherein the cooling tower top is rotationally molded.

24. A method for forming a cooling tower top basin and bottom basin, said method comprising the steps of:

molding the top basin and the bottom basin from a plastic material as a unitary piece; and

separating the top basin and the bottom basin from each other.

25. The method of claim 24, wherein the top basin and the bottom basin are rotationally molded.

26. The method of claim 24, wherein the plastic material is polyethylene.

27. The method of claim 24, wherein the top basin and bottom basin are separated by a utilizing a laser, a hot edge, abrasion, high pressure water and/or a sharp edge.